

Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]

Page 2 of 11

Serial No.: 09/877.220

Confirmation No.: 8535

Filed: June 8, 2001

For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN

---

### Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

#### Listing of Claims

1-29. Cancelled

30. (Currently Amended) A method for altering NR1 subunit distribution in a cell, the method comprising:

contacting a test cell with a compound selected from the group consisting of a tyrosine kinase, a tyrosine kinase inhibitor, a tyrosine phosphatase, a tyrosine phosphatase inhibitor, a serine/threonine phosphatase, or a serine/threonine phosphatase inhibitor;

activating an NMDA glutamate receptor present on the test cell and on a control cell; and

detecting the distribution of NR1 subunit in the test cell and the control cell, wherein the distribution of NR1 subunit in the test cell contacted with the compound is altered relative to the distribution of NR1 subunit in the control cell not contacted with the compound, wherein the alteration in the distribution of NR1 subunit is a decrease in ~~The method of claim 29 wherein the amount of NR1 subunit associated with a nucleus of a test cell contacted with a compound is decreased.~~

31. (Currently Amended) A method for altering NR1 subunit distribution in a cell, the method comprising:

contacting a test cell with a compound selected from the group consisting of a tyrosine kinase, a tyrosine kinase inhibitor, a tyrosine phosphatase, a tyrosine phosphatase inhibitor, a serine/threonine phosphatase, or a serine/threonine phosphatase inhibitor;

Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]

Page 3 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN

activating an NMDA glutamate receptor present on the test cell and on a control cell; and

detecting the distribution of NR1 subunit in the test cell and the control cell, wherein the distribution of NR1 subunit in the test cell contacted with the compound is altered relative to the distribution of NR1 subunit in the control cell not contacted with the compound, wherein the alteration in the distribution of NR1 subunit is an increase in ~~The method of claim 29 wherein the amount of NR1 subunit associated with a nucleus of a test cell is increased.~~

32-33. Cancelled

34. (Previously Presented) A method for identifying a compound that alters NR1 subunit distribution in a cell, the method comprising:

contacting a cell with a compound;

activating an NMDA glutamate receptor present on the cell; and

detecting the distribution of NR1 subunit in the cell, wherein an alteration in the distribution of NR1 subunit in the cell contacted with the compound relative to the distribution of NR1 subunit in a cell not contacted with the compound indicates the compound alters the distribution of NR1 subunit in the cell, wherein the alteration in the distribution of NR1 subunit in the cell is a decrease in the amount of NR1 subunit associated with the nucleus.

35. (Previously Presented) A method for identifying a compound that alters NR1 subunit distribution in a cell, the method comprising:

contacting a cell with a compound;

activating an NMDA glutamate receptor present on the cell; and

detecting the distribution of NR1 subunit in the cell, wherein an alteration in the distribution of NR1 subunit in the cell contacted with the compound relative to the distribution of NR1 subunit in a cell not contacted with the compound indicates the compound alters the

**Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]**

Page 4 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

**For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN**

distribution of NR1 subunit in the cell, wherein the alteration in the distribution of NR1 subunit in the cell is an increase in the amount of NR1 subunit associated with the nucleus.

36-45. Cancelled

46. (Previously Presented) A method for identifying a compound that alters the amount of NR1 subunit in a cell, the method comprising:

- contacting a cell with a compound;
- activating an NMDA glutamate receptor present on the cell; and
- detecting the amount of NR1 subunit in the cell;

wherein an alteration in the amount of NR1 subunit in the cell contacted with the compound relative to the amount of NR1 subunit in a cell not contacted with the compound indicates the compound alters the amount of NR1 subunit in the cell, wherein the alteration in the amount of NR1 subunit in the cell is a decrease in the amount of NR1 subunit associated with the nucleus.

47. (Previously Presented) A method for identifying a compound that alters the amount of NR1 subunit in a cell, the method comprising:

- contacting a cell with a compound;
- activating an NMDA glutamate receptor present on the cell; and
- detecting the amount of NR1 subunit in the cell;

wherein an alteration in the amount of NR1 subunit in the cell contacted with the compound relative to the amount of NR1 subunit in a cell not contacted with the compound indicates the compound alters the amount of NR1 subunit in the cell, wherein the alteration in the amount of NR1 subunit in the cell is an increase in the amount of NR1 subunit associated with the nucleus.

48-53. Cancelled

**Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]**

Page 5 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

**For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN**

---

54. (Previously Presented) A method for identifying a tyrosine kinase inhibitor that alters NR1 subunit distribution in a cell, the method comprising:
- contacting a cell with a tyrosine kinase inhibitor;
  - activating an NMDA glutamate receptor present in the cell; and
  - detecting the distribution of NR1 subunit in the cell, wherein an alteration in the distribution of NR1 subunit in the cell contacted with the tyrosine kinase inhibitor relative to the distribution of NR1 subunit in a cell not contacted with the tyrosine kinase inhibitor indicates the compound alters distribution of NR1 subunit, wherein the alteration in the distribution of NR1 subunit in the cell is a decrease in the amount of NR1 subunit associated with the nucleus.
55. (Previously Presented) A method for identifying a tyrosine kinase inhibitor that alters NR1 subunit distribution in a cell, the method comprising:
- contacting a cell with a tyrosine kinase inhibitor;
  - activating an NMDA glutamate receptor present in the cell; and
  - detecting the distribution of NR1 subunit in the cell, wherein an alteration in the distribution of NR1 subunit in the cell contacted with the tyrosine kinase inhibitor relative to the distribution of NR1 subunit in a cell not contacted with the tyrosine kinase inhibitor indicates the compound alters distribution of NR1 subunit, wherein the alteration in the distribution of NR1 subunit in the cell is an increase in the amount of NR1 subunit associated with the nucleus.
- 56-67. Cancelled
68. (New) The method of claim 34, wherein the cell is a neuron.
69. (New) The method of claim 34, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present on the cell.

**Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]**

Page 6 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN

---

70. (New) The method of claim 34, wherein the compound is selected from the group consisting of a tyrosine kinase inhibitor, a tyrosine phosphatase, and a serine/threonine phosphatase.
71. (New) The method of claim 34, wherein the compound is selected from the group consisting of a tyrosine kinase, a tyrosine phosphatase inhibitor, and a serine/threonine phosphatase inhibitor.
72. (New) The method of claim 35, wherein the cell is a neuron.
73. (New) The method of claim 35, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present on the cell.
74. (New) The method of claim 35, wherein the compound is selected from the group consisting of a tyrosine kinase inhibitor, a tyrosine phosphatase, and a serine/threonine phosphatase.
75. (New) The method of claim 35, wherein the compound is selected from the group consisting of a tyrosine kinase, a tyrosine phosphatase inhibitor, and a serine/threonine phosphatase inhibitor.
76. (New) The method of claim 46, wherein the cell is a neuron.
77. (New) The method of claim 46, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present on the cell.

## Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]

Page 7 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN

---

78. (New) The method of claim 46, wherein the compound is selected from the group consisting of a tyrosine kinase inhibitor, a tyrosine phosphatase, and a serine/threonine phosphatase.
79. (New) The method of claim 46, wherein the compound is selected from the group consisting of a tyrosine kinase, a tyrosine phosphatase inhibitor, and a serine/threonine phosphatase inhibitor.
80. (New) The method of claim 47, wherein the cell is a neuron.
81. (New) The method of claim 47, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present on the cell.
82. (New) The method of claim 47, wherein the compound is selected from the group consisting of a tyrosine kinase inhibitor, a tyrosine phosphatase, and a serine/threonine phosphatase.
83. (New) The method of claim 47, wherein the compound is selected from the group consisting of a tyrosine kinase, a tyrosine phosphatase inhibitor, and a serine/threonine phosphatase inhibitor.
84. (New) The method of claim 54, wherein the cell is a neuron.
85. (New) The method of claim 54, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present on the cell.
86. (New) The method of claim 55, wherein the test cell and the control cell is neuron.

**Amendment and Response [Under 37 C.F.R. §1.116 - Expedited Examining Procedure]**

Page 8 of 11

Serial No.: 09/877,220

Confirmation No.: 8535

Filed: June 8, 2001

For: METHODS FOR TREATING NEUROPATHOLOGICAL STATES AND NEUROGENIC  
INFLAMMATORY STATES AND METHODS FOR IDENTIFYING COMPOUNDS USEFUL THEREIN

87. (New) The method of claim 55, wherein the contacting a cell with a compound occurs before, during, or after activating an NMDA glutamate receptor present in the cell.